AUTHOR INDEX VOLUME 55

Abbas M. I., 245 Abd El-Maksoud T. M., 135 Abd El-Naby H. H., 861 Abdel-Ghany H. A., 575 Abdel-Haleem A. S., 569, 853, 873

Abdul-Hadi A., 109 Acharya R. N., 595 Adu P. S., 175 Agarande M., 161 Ahmad M., 731

Ahmadian-Pour M. R., 189 Ahmed F., 853, 873

Aitnouh F., 205

Akaho E. H. K., 175, 617

Akram W., 731 Al-Azmi D., 413

Alcaraz Pelegrina J. M., 419

Aldahan A., 715 Alhassanieh O., 109 Ali A. F., 115 Altzitzoglou T., 493 Amer H., 135

Angelone M., 505 Anim-Sampong S., 175, 617

Appoloni C. R., 697 Aragno D., 375

Arif M., 647 Arjun G., 561

Arnold D., 493

Baffa O., 13 Bakac M., 721 Bandong B. B., 653 Banerjee K., 751 Banjade D. P., 235, 297

Basile S., 259 Bastian Th., 303 Bazioglou M., 339 Bäck T., 157

Bellia S., 259 Benzoubir S., 161

Berrazzouk S., 205 Betenekova T. A., 363

Bianchini G. M., 653 Blackburn B. W., 767

Bodizs D., 103

Bogni A., 17

Bontchev G. D., 293

Borsaru M., 407

Bossus D., 347

Bouisset P., 161

Bozadjiev L. L., 701 Brai M., 259

Bronson F., 493

Bubba T., 505 Buckley K. R., 457

Buraglio N., 715 Byrne A. R., 347

Calmet D., 161 Camargo S. P., 477

Cannizzaro F., 129

Capote Roy R., 493

Cavouras D., 831 Chao J.-H., 549

Chaudhary P. R., 471

Chen F., 13 Chen J., 323

Chen Z.-Q., 793

Cheng J.-P., 793

Cheung T. T. K., 707

Chiadli A., 167

Chichester D. L., 767

Chiozzi P., 737

Christina Melo e Silva M., 899

Chu T.-C., 315, 383, 609, 623, 679, 759

Chun K. S., 457 Chunfu Z., 441

Coenen H. H., 149, 303

Colacicchi S., 71 Covas D. T., 13

Cuéllar S., 849

Czifrus Sz., 103

da Cruz M. T. F., 477

Dagadu C. P. K., 175, 617 Dawood Y. H., 881

Décombaz M., 493

De Corte F., 347, 493

de Hooge M. N., 783

de Sanoit J., 493

De Wispelaere A., 347

Delfin A., 805

Dixon R., 407

Djeffal S., 141

Domnikov V. N., 543

dos Santos J. M. F., 331

Du J., 181

Edelmaier R., 493

El-Bahi S. M., 569, 575, 873

El-Shershaby A., 853

Elejalde C., 521

Elyahyaoui A., 167

Esposito A., 505

Esser B. K., 653

Ewa I. O. B., 103

Ezzahery H., 205

Fattibene P., 375

Füchtner F., 631

Filossofov D. V., 293

Finn R. D., 463

Finn R.D., 667

Fleming D. E. B., 527 Forbes T. A., 527

Frána J., 347

Fujii H., 517

Furetta C., 533

Gano L., 899

Garcia-León M., 849

Garg A. N., 595

Genezini F. A., 477

Ghafar M., 109

Ghahramani A. R., 189

Ghandi M., 789

Ghannadi-Maragheh M., 605

Ghiassi-Nejad M., 189 Giannoni M., 71

Gierga D. P., 767

Günther E., 89

Goncalves I. F., 447

Goto A., 755

Greco G., 129

Gualtieri G., 71

Guzmán-Rincón J., 805

Güven H. H., 9

Hafez A. F., 355 Hamajima Y., 221 Hamlat M. S., 141 Haquin G., 197 Hassan A. M., 575 Hassfjell S., 433 Hauser S., 259 Hemmingsen I. D., 281 Herranz M., 521 Herrera Peraza E., 493 Hiltunen J., 181 Hirota M., 513 Hohn A., 149 Holmberg A. R., 181 Holschbach M., 309 Honoki H., 221 Horák Z., 347 Hoshi M., 701, 843 Hsu C.-C., 679 Hsu H.-H., 323 Hsu P.-C., 549 Hurtado E. T., 457 Hushari M., 115 Hussain S. D., 731 Hussein A. S., 355 Hutchinson E. F., 281 Hyodo T., 755

Ibrahiem N. M., 135 Ibrahim M. E., 861 Ido T., 17 Ignatiev E. A., 363 Ikeya M., 896 Inohae E., 899 Itoh Y., 755 Ivannikov A. I., 701, 843 Iwata R., 17

Jafarizadeh M., 189 Jager P. L., 783 Jaćimović R., 347 Jecny Z., 407 Jensen H. J., 157 Jin H., 793 Jivan S., 457 Jonah S. A., 175, 617 Juncheng G., 125

Kadi H., 141 Kalef-Ezra J., 339 Kandarakis I., 831 Kanosue K., 896 Kasch H., 631 Kateris A., 831 Kauri T., 427 Khajmi H., 205

Khalafi H., 605 Khamidova L. G., 701, 843 Kheitou M., 115 Khomichyonok V. V., 701 Kida T., 229 Kim J., 755 Kitis G., 533 Klein A. T. J., 309 Klein R., 89 Klemola S., 493 Kobashi A., 327 Kondo T., 221 Kondrashov A. E., 843 Kondrashov V. S., 799 Korun M., 493, 685 Kralik M., 493 Kudo A., 427 Kučera J., 347 Kumar R., 889 Kumru M. N., 721 Kurihara T., 755 Kyere A. W. K., 175, 617

Lahiri S., 751
Lapolli A. L., 477
Lazanin Ž., 267
Lebedev N. A., 293
Legarda F., 521
Lin C.-C., 609
Lin J.-P., 315, 383, 623, 679, 759
Lin S.-Y., 315, 383, 679, 759
Lindegren S., 157
Liu H.-M., 549
Liu M.-T., 315, 383, 623
Lépy M. C., 493
Lusa Sá e Melo M., 899
Luurtsema G., 783
Lyubashevskii N. M., 363

Ma D., 463, 667 Maakuu B. T., 175, 617 Manjón G., 849 Manohar S. B., 751 Marquez M., 181 Martinho E., 447 Martin Sánchez A., 97 Martinez-Aguirre A., 419 Mataka S., 899 Matloubi H., 789 McDevitt M. R., 463, 667 Medeiros J. A. G., 477 Melquiades F. L., 697 Meric N., 557 Minato S., 737 Miramonti L., 485 Misdaq M. A., 205

Miyake Y., 17 Mohapatra D. K., 693 Molnar Zs., 103 Monteiro C. M. B., 331 Mukherjee A., 471 Mukhopadhyay K., 751 Murali S., 253 Murugesan S., 641 Mushtaq A., 647

Nada A. A., 135 Nada A., 575 Nagashima Y., 755 Nakajima T., 221 Nakanishi T., 221 Natarajan V., 253 Nath R., 813 Nazari K., 605 Neder H., 493 Neronova E., 335 Nichols A. L., 23 Nikezić D., 121 Nikezic D., 707 Nikiforov A., 335 Nikiforov S. V., 363 Nilsson S., 181 Nir-El Y., 1, 197 Nishizawa K., 513 Nomicos C. D., 831 Norizawa K., 896 Noronha O. P. D., 641 Nortier F. M., 149 Novgorodov A. F., 293

Ogata Y., 513 Onori S., 375 O'Meara J. M., 767

Panayiotakis G. S., 831 Pandey U., 471 Paredes L. C., 805 Pascali C., 17 Pasquale V., 737 Patil D. D., 289 Patricio L., 899 Päch M., 215 Pervez S., 647 Piers A., 783 Pillai M. R. A., 471 Plagnard J., 493 Planinić J., 267 Pohl K. P., 281 Pommé S., 493 Possnert G., 715 Prasad R., 889 Pushparaja 253

Qaim S. M., 149, 303

Radolić V., 267 Rajurkar N. S., 289 Ramakrishna V. V. S., 595 Ramamoorthy N., 561 Ramaswami A., 751 Raneli M., 129

Reddy A. V. R., 595 Reddy C. P., 693

Ribeiro F. B., 393 Rivard M. J., 775

Rizzo S., 259 Römer J., 631

Rojc A., 407 Romero F., 521

Roque A., 393 Rosner G., 823

Rothenberg S. J., 799 Rubio Montero M. P., 97

Ruckerbauer F., 273 Ruth T. J., 457

Saemian N., 789 Saito F., 755

Sajjad M. I., 731 Saleh G. M., 861

Salgado J., 447 Saltykov L. S., 543

Samuel A. M., 641 Sanipoli C., 533

Santopietro F., 533 Saraswathy P., 561

Sarkar S. K., 561 Sasaki T., 427

Sastry M. D., 253 Sayed A. M., 413

Saze T., 513 Scheinberg D. A., 463

Scheinberg D. A., 667 Schönfeld E., 89

Scholten B., 149 Schrader H., 89 Schötzig V., 89

Sengupta D., 889 Sgattoni R., 71

Shamsaii M., 605

Shawky S., 135

Shetty S. J., 641 Shevchenko S. V., 543

Shishkina E. A., 363

Shoji M., 221

Shukri A., 235, 297

Shweikani R., 115 Silver G. L., 589

Sima O., 1, 493 Simonits A., 347

Singh A. K., 889

Skripnik D. D., 701

Skvortsov V. G., 701, 843 Slozina N., 335

Slusarenko L. I., 543

Smodiš B., 347 Spitale M. C., 129

Srivastava T. S., 641

Sroor A., 569, 873 Starodub G. Y., 293

Stehle R., 407 Steinbach J., 631

Stepanenko V. F., 701, 843

Stößer R., 215 Suzuki K., 229 Suzuki N., 755

Tabata T., 125

Tajuddin A. A., 235, 297

Takatsuka K., 221 Takei M., 229

Takiue M., 517 Takriti S., 115

Taylor D. M., 285, 745

Tepehan F. Z., 9 Tepehan G. G., 9

Thiemann T., 899

Tikounov D. D., 843 Tikunov D. D., 701

Tolstykh E. I., 363

Tomarchio E., 129

Tsoukos S., 831

Ugletveit F., 493 Ureña-Nuñez F., 805 Urošević V., 121

Uğur (Tanbay) A., 581

Vaca F., 849

van der Walt T. N., 149

van Sluijs R., 347

Van Velzen L., 493

Vasilik D. G., 323 Venkataramani R., 253

Venkatesh M., 471

Verdoya M., 737 Vidmar T., 493

Vojtyla P., 81

Volpe A. M., 653

Wallace G., 281

Walley El-Dine N., 853

Wang X., 453

Wei L., 755 Winkler R., 273, 823

Wu G., 895

Xiuli Z., 441

Yanai K., 17

Yanch J. C., 767 Yanli Z., 125

Yatim H. A., 413

Yener G., 581

Yongping Z., 441

Yongxian W., 441

Yu K. N., 707

Yuandi Y., 125

Yuda Z., 125 Yue N., 813

Zafar M. S., 731

Zamboni C. B., 477 Zambrano F., 805

Zarki R., 167

Zarrindast M.-R., 789

Özben C. S., 9

Zeisler S., 457

Zevallos-Chávez J. Y., 477

Zhang J., 453 Zhang L., 793

Zohny E., 569





SUBJECT INDEX VOLUME 55

Accelerator	
Based: feasibility of NAA of nitrogen	767
CERN: calibration of monitors for radioactivity in effluent water	81
Linear, photon and electron beams: comparison of various protocols for determination of absorbed dose	235
PRIMUS: Monte Carlo simulation of dose distribution in water	759
Siemens Primus linear: measurement of photo neutrons in the vicinity Actinium	3154
²²⁵ Ac breakthrough together with daughters from a ²²⁵ Ac/ ²¹³ Bi generator: study	665
	667
Activation analysis NAA	
	575
Elemental investigation of Egyptian motor vehicle alloys	
Kay zero assisted: installation and calibration in central Europe	347
Of nitrogen: feasibility of use of an accelerator	767
Use for thin film thickness determination	50.0
Use of gold as a monostandard	595
Use to determine heavy metals and rare earth elements in phosphate fertilizer	569
Adsorption Of ¹³¹ I on platinum-charcoal for separation from irradiated uranium	605
Alanine	
Dosimeter: evaluation for determination of irradiation dose to blood	13
Albedo	
Measurement to assay nuclear materials in solutions	693
Alloy	
Egyptian motor vehicle: elemental analysis by NAA	575
Alpha particle	
Activity monitoring of airborne particles: effectiveness of spectrometry	54:
Emitting radio-immunopharmaceuticals: preparation	463
Evaluation of activity of radon and thoron in natural samples by SSNTD	20:
Source: U(VI) and Th(IV) by electrodeposition in presence of Cu ²⁺ and trivalent metals	16
Alumina	
Chromatographic column: use to extend the life of a 99mTc generator	56
Americium	
²⁴¹ Am in sediments: determination by isotope dilution high resolution inductively coupled plasma mass spectrometry	16
Analyser	
Nucleonic: for determination of coal ash of the coal face or the surface of stockniles	40

^{*} Indicates a Technical Note.

[†] Indicates a Letter to the Editor.

Antibody Monoclonal: HuM195-CHX-A-DTPA conjugation with ²¹³ Bi for use in radio- immunotherapy	463
Arrhenius curve	
Models for a peak: comments on radiation effects in dry ice	895 [†] ,896 [†]
Ash	
Coal: portable nucleonic analyser for determination at the coal face or on stockpiles	407
Volcanic: use of thin layer activation for on-line erosion monitoring	281
Astatine	
²¹¹ At: dry distillation from irradiated Bi targets	157
Atmosphere	
Of Kuwait 1994–8: variations in ⁷ Be concentrations	413
Background	
Signal in tooth enamel: elimination for EPR dosimetry	701
Bacteria	
Anaerobic: effect of pH and temperature on sorption of Np and Pa	427
Barium	
¹³⁹ Ba decay: α-ray spectra of ¹³⁹ La product	477
Beam	
Electron, dose: comparison of discrepancy between chemical dosimeters and calorimeter	125
Electron and photon: determination of absorbed dose from a linear accelerator by comparing various protocols on different phantoms	235
Electron and photon: use of Rhizophora spp. wood phantom for dosimetric purposes	297
Beryllium	
⁷ Be concentrations in atmosphere of Kuwait 1994–8	413
⁷ Be: local and collector surface effects in sampling for determination of deposition to ground	823
Bismuth	
²¹³ Bi: generator produced for conjugation with monoclonal antibodies	463
²¹³ Bi production from ²²⁵ Ac: development of generator and evaluation	667
Irradiated target: separation of ²¹¹ At by dry distillation	157
Blood	
Dicentrics persistence in Chernobyl clean-up workers	335
Irradiation: determination of dose using an alanine/ESR dosimeter	13
Body	(22
Total irradiation therapy: dose compensation	623
Bone Dicital VBE system for land, without or and all systems and all systems are a size of the systems.	527
Digital XRF system for lead: calibration and characterisation	527
In vivo lead analysis: calculation of Pb concentration and uncertainty in XRF Book	799
Pages printed in the 1960s in Japan: ¹³⁷ Cs content	227
Review of radioactivity in the environment	327 745
Boron	143
¹⁰ B estimation in heavy water by neutron reflection method	693
LS-1-Brachyseed TM	093
Interstitial brachytherapy ¹²⁵ I source: dosimetric characterization	813
Brachytherapy	313
Dosimetric characteristics of ¹⁹² Ir sources	189
Interstitial source of ¹²⁵ I (model LS-1-Brachyseed TM)	813
TG-43 dosimetry parameters: discretized approach using Monte Carlo calculations for the	775
MED 3633 ¹⁰³ Pd source	

Subject index volume 55 l Applied Radiation and Isotopes 57 (2002) XV-XXVIII	XVII
Brain	
Imaging: preparation of ^{99m} TcN(CBDTC) ₂ and biodistribution in mice	453
Building Materials: α-activity in Sicily	259
Calcium	
CaSO ₄ :Dy: evaluation for ESR dosimetry	253
Calorimeter	
Dose measurement for an electron beam: discrepancy with a chemical dosimeter	125
Carbon dioxide Dry ice: comments on radiation effects and models for a peak on the Arrhenius curve	895 [†] ,896 [†]
Cement	093,090
Radon diffusion through varying depths	115
Cesium	
Bromide: electrolytic diffusion coefficient in water	289
¹³⁷ Cs contained in books printed during 1960s in Japan	327
¹³⁷ Cs: local and collector surface effects in sampling for determination of deposition to	823
ground	
Charcoal	
Activated: in radon measurement and simulation of skim-off method	121
Platinum sorbent: use to separate ¹³¹ I from natural uranium fission products	605
Chernobyl	
Accident: EPR dosimetry of dental enamel of children	71
Clean-up workers: persistence of dicentrics after low doses of radiation	335
Children	71
Dental enamel: EPR dosimetry after Chernobyl accident	71
Chromatography Alumina column: feasibility of extending life of a ^{99m} Tc generator	561
Ion exchange: use in concentration and purification of ¹¹¹ In radiochemicals	561
11-[14C]-Clozapine {8-chloro-11-(4-methyl-1-piperazynyl)-11-[14C]-5H dibenzo[b,e][1,4]	293
diazapine} {6-cnioro-11-(4-metnyt-1-piperazynyt)-11-[Cj-5H divenzo[0,e][1,4]	
Synthesis	789
Coal	109
Portable analyser for determining ash on the coal face and on stockpiles	407
Code	407
CYLTRAN: use for radiation transport and dose calculations for material interfaces	323
GEANT3.21: use for simulation to determine monitor efficiency for radioactivity in effluent water	
MCNP: use to calculate epithermal neutron resonance self shielding factors in wires	447
OMEGA/BEAM: use in Monte Carlo simulation of dose distribution due to a clinical linear accelerator	
Container	
Large, inspection system: geometrical rectification of images	793
Copernicus project	
Installation and calibration of Kay-zero-assisted NNA in 3 central European countries	347
Copper	990*
U mineralization: radiometric prospecting on rocks in Singhbhum area of Bihar Counter	889*
Gas flow proportional: use for determination of ⁹⁰ Sr and factor of merit and minimum	849*
detectable activity Counting	
Foggy scintillator technique	517

Gas flow proportional or Cherenkov: factor of merit and minimum detectable activity for ⁹⁰ Sr <i>CR-39</i>	849*
Monte Carlo calculation for determining detection efficiency for α -particles from radon and thoron <i>Cyclam acid porphyrin (CAP)</i>	205
^{99m} Tc labelled: use in tumour imaging	641
Cyclotron Production of n.c.a. ¹⁰³ Pd	441
Dating	
Disequilibrium: of secondary uranium ore from the south Eastern Desert of Egypt Decay	881
Data of ¹⁷⁷ Lu and ¹⁸⁸ Re and standardisation	89
Data: review of measurements, evaluations and compilations	23
Of ¹³⁹ Ba and energy levels of ¹³⁹ La decay product	477
Deposition	
Atmospheric, of ²³⁹⁺²⁴⁰ Pu and ²³⁸ Pu in an arid area of Spain: activity	97
¹³⁷ Cs and ⁷ Be on ground: dependence on local and collector surface effects in sampling <i>Depth</i>	823
Dose measurements using a <i>Rhizophora</i> spp. wood phantom for electron and photon beams	297
Detective quantum efficiency	291
Theoretical model for calculation in granular scintillators	831
Detector	031
BD-PNP bubble: use in measurement of photoneutrons in the vicinity of a Siemens Primus linear accelerator	315*
Calibration for radioactivity in effluent water from CERN accelerator	81
HPGe	
Angular response to γ -rays in in situ measurements	1
Monte Carlo determination of full energy peak efficiency	103
Response to X-rays with energy in the region of Ge k-absorption edge	331
Polymeric track: use to determine Rn concentrations in Egyptian tombs	355
Positron: development for PET metabolites	229
Scintillation: low energy threshold for X- and γ -rays at Fréjus underground laboratory	485
Solid state nuclear track: efficiency for Rn and Th in natural samples	205
Ultra thin TL: use for skin dose measurements	383
Well type NaI(TI) and HPGe: analytical formulae for efficiency computation	245
X-ray, mobile system for large containers: rectification of images Dicentrics	793
Persistence in blood of low dose Chernobyl clean-up workers Diffusion	335
	200
Electrolytic coefficient of CsBr in water	289
Dimethyl sulfoxide Competing labelling during ¹¹ C methylation of amine precursors	200
	309
Distillation Dry: use to separate ²¹¹ At from irradiated Bi targets	1.57
	157
sym-Di[4(5)tert-butylbenzo]-16-crown-5-oxyacetic acid (DTBDB16C5-OAcH) Use in solvent extraction of radium	(00
Dose	609
	262
Absorbed due to ⁹⁰ Sr in dental tissue: comparison of Monte Carlo calculation to EPR measurement	363
Absorbed from photon and electron beams: comparison of determination by different protocols on different phantoms	235
Absorbed in Drosophila melanogaster when neutron irradiated	805

Subject index volume 55 / Applied Radiation and Isotopes 57 (2002) XV-XXVIII	XIX
Air absorbed rate due to natural radiation in the Aeolin volcanic arc	737
Compensation of total body irradiation therapy	623
Depth distribution in calorimeter and dosimeter for an electron beam: discrepancy in measurements	125
Determination for the lens of the eye by Monte Carlo calculation	557
Distribution in water: Monte Carlo simulation for PRIMUS clinical linear accelerator	759
Due to radon activity in ancient Egyptian tombs	355
Enhancement from photon beams at material interfaces	323
Gamma rate from building materials used in Sicily	259
High rate measurement by photon activation of indium foils	549
Measurement for skin using ultra thin TLDs	383
Reconstruction by EPR spectroscopy: use of porcelain insulators	843
Dosimeter	
Alanine: evaluation for determination of radiation dose to blood	13
Bronchial: design for measurement of radon progeny	707
Chemical: discrepancy with calorimeter dose measurement for an electron beam	125
Thermoluminescent: response to low energy protons in the range 30–100 keV Dosimetry	697
Characterization of an encapsulated interstitial brachytherapy source of ¹²⁵ I: model—LS1-Brachyseed TM	813
EPR: elimination of background signal in tooth enamel samples	701
EPR: on dental enamel of children after Chernobyl accident	71
ESR: study of Li ₂ CO ₃ and CaSO ₄ :Dy as prospective dosimeters	253
TG-43 brachytherapy parameters: Monte Carlo calculations for the MED 3633 103Pd source	775
TL: study of thermoluminescent properties of perovskite (KMgF ₃) activated by Ce and Er impurities	533
Use of Rhizophora spp. wood phantom in measurements on electron and photon beams	297
With radiochromic films: evaluation	339
Drosophila melanogaster	
Determination of absorbed dose from neutron irradiation and genetic effects	805
Earthquake	
Effect on radon levels in soil Electrodeposition	267
Method of preparation of U(VI) and Th(IV) α -sources in presence of Ca ²⁺ and trivalent	167
metals Element	107
Concentration in environmental SRMs and river sediments by k_0 method using gold as a monostandard	595
Enamel	
Dental: EPR dosimetry after Chernobyl accident	71
Tooth: elimination of background signal in EPR dosimetry	701
Tooth: mechanically induced EPR signals during sample preparation	375
EPR	
Dosimetry on dental enamel of children after Chernobyl accident	71
Measurement of ⁹⁰ Sr absorbed dose in dental tissue: comparison with Monte Carlo calculations	363
Signal: mechanical induction in tooth enamel	375
Spectroscopy: use of porcelain insulators for dose reconstruction	843
Erosion Monitoring: use in thin layer activation	201
wontoring, use in thin layer activation	281

Erratum	
Correction to author's address in 'Synthesis and biological evaluation of two radiolabelled estrogens' (JARI 54, p. 227)	899
ESR	
Dosimetry: evaluation of Li ₂ Co ₃ and CaSO ₄ :Dy as prospective dosimeters	253
Spectroscopy for H-atoms and free radicals trapped in octasilsesuioxanes Estrogen	215
Correction to address of M. Cristina Melo e Silva in JARI 54 227	899
EUROMET project For intercomparison of efficiency transfer software for γ -ray spectrometry	493
Excitation functions	
Of ¹²⁴ Te(d,xn) ^{124,125} I reactions with reference to production of ¹²⁴ I	303
Of ¹²⁵ Te(p,xn) reactions with reference to production of ¹²⁴ I	149
Fertilizer	
Factory in S. Spain: effect on natural radioactivity in surrounding groundwater	419
Phosphate: determination of heavy metals and rare earth elements by NAA	569
Film	507
Raadiochromic: dose assessment by document scanner technique, neutron response and	339
applications	
Thickness: determination by NAA	9
Fluoride	
¹⁸ F-fluoride: production in high yield from gas target	457
Fluorine	
¹⁸ F labelled: electrochemical production from [¹⁸ O] water	755
16α - $[^{18}F]$ -Fluoroestradiol-3,17 β -disulphamate	
Synthesis	631
Formula	2.45
For efficiency computation for well type NaI(Tl) and HPGe detectors	245
Free radical Transing with actually ac	215
Trapping with octasilsesqioxanes for ESR spectroscopy	213
Gamma ray	
Activity and dose rate from building materials in Sicily	259
Angular response of a HPGe detector in in situ measurements	1
Emission probabilities of ¹⁷⁷ Lu and ¹⁸⁸ Re	89
Low energy threshold detector at Fréjus underground laboratory	485
Natural radiation in the volcanic Aeolin arc	737
Gas NOP A 11	1.414
Industry: assessment of radiation exposure to NOR materials Generator	141*
²²⁵ Ac/ ²¹³ Bi: development and quantitative studies	667
²¹² Pb based on a ²²⁸ Th source	33
⁹⁹ Tc: extension of life by using an alumina chromatographic column	561
Germanium	301
Detector: response to X-rays with energy in region of the Ge k-absorption edge	331
Glycosylated somatostatin-14 99m Tc labelling	
Gold	181
Use as a monostandard for determination of elemental concentrations in SRMs and Ganga	595
river sediments	

Subject index volume 55 Applied Radiation and Isotopes 57 (2002) XV-XXVIII	XX
Granite	
Measurement of radioactivity and radon exhalation rate	853
Two mica, of Gabal Ribdah, Egypt: uranium and thorium mineralization	861
Half life	
Of ¹⁷⁷ Lu and ¹⁸⁸ Re	89
Heat	
Volumetric production rates in sediments of the São Francisco basin, Brazil <i>HPLC</i>	393
Use in the measurement of positron emitters	229
Hydrogen	
Atoms: use of octasilsesquioxanes as trapping agents for ESR spectroscopy	215
Total, in Ghanian petroleum products: measurement by thermal neutron reflection method	617
Hydroxy apatite	
⁹⁰ Y labelled particles: preparation for synovectomy	471
Imaging	
Of large containers: geometrical rectification of images from a mobile system	793
Plate: use in feasibility study of in vivo thyroid ¹³¹ I monitoring	513
Indium	
Foils: measurement of high dose rates by photon activation	549
¹¹¹ In radiochemicals: production, concentration and purification Interface	293
Material: photon radiation dose enhancement	323
Iodine	
¹²⁴ I thick target yield: excitation functions of ¹²⁵ Te(p,xn) reactions	149
¹²⁴ I thick target yield: excitation functions of ¹²⁴ Te(d,xn) ^{124,125} I reactions	303
¹²⁵ I brachytherapy source (model LS 1-Brachyseed TM): dosimetric characterization	813
¹²⁹ I in lakes in Chernobyl fallout region	715
¹³¹ I in vivo monitoring in the thyroid: feasibility	513
¹³¹ I separation from natural uranium fission products	605
L-3-[1231]Iodoalpha-methyl tyrosine	
Synthesis	783
Iridium	
¹⁹² Ir sources: dosimetric characteristics when used in interstitial brachytherapy	189
Iron	
⁹⁰ Y labelled ferric hydroxide macroaggregates: preparation for radiation synovectomy	47
k _o method	
For elemental concentrations in the environmental SRMs and sediments	595
Lanreotide	
Direct labelling with ^{99m} Tc	647
Lanthanum	
¹³⁹ La energy levels following decay of ¹³⁹ Ba	477
Lead	
Concentration and its uncertainty in XRF in vivo analysis in bone	799
In bone: digital XRF system calibration and characterisation	527
²¹⁰ Pb dating in sediments in Gökova Bay (Aegean sea—Turkish coast)	581
²¹⁰ Pb in air filters: evaluation of a low level spectrometer with a planar low energy HPGe shield	129*
²¹² Pb generator based on a ²²⁸ Th source	433

Lens	
Eye: calculation of radiation dose using Monte Carlo simulation	557
Lithium	001
Li ₂ CO ₃ : evaluation for ESR dosimetry	253
LR-115 II	
Monte Carlo calculation for determining detection efficiency for α -particles from radon and thoron	205
Lutetium	
¹⁷⁷ Lu standardisation and decay data	89
Marble	
Measurement of radioactivity and radon exhalation rate	853
Marinelli beaker	
Use in γ-ray spectrometry of powdered milk samples	697
Mass attenuation coefficients	
Measurement for elemental materials in range $6 \le Z \le 82$ using X-rays from 13–50 keV	505
Uncertainties: effect on counting efficiency in γ -spectrometry	685
Material	
Elemental in range $6 \le Z \le 82$: measurement of mass attenuation coefficients	505
Metal	240
Heavy, in phosphate fertilizers: determination by NAA	569
Milk Powder: self absorption correction for γ-spectrometry using Marinelli beakers	697
Monte Carlo	097
Calculation of epithermal neutron resonance self shielding factors in wires	447
Calculation of ⁹⁰ Sr absorbed dose in dental tissues: comparison with EPR measurements	363
Calculations for the MED 3633 ¹⁰³ Pd source using a discretized approach	775
Computer code for determining detection efficiency of CR-39 and LR115II solid state track detectors	205
Determination of full energy peak efficiency for HPGe detector Simulation	103
For intercomparison of efficiency transfer software for γ -ray spectrometry	493
For radioactivity measurements in effluent water from CERN accelerator	81
Of a clinical linear accelerator	759
Of albedo of thermal neutrons and use for assay of nuclear materials in solutions	693
Of angular response of a HPGe detector to γ -rays in in situ measurements	1
Use in calculation of radiation dose to the lens of the eye Methyl iodide	557
[11 C] labelled: use in 11 C methylation of amine precursors and competition of solvent DMSO [11 C] Methyl triflate	309
Use in preparation of [11C] raclopride by a simple loop method	17
Neptunium Essential III and American III and	407
Effect of pH and temperature on sorption to mixed anaerobic bacteria Neutron	427
Epithermal, resonance self shielding factors in wires: Monte Carlo calculations	447
Irradiation of <i>Drosophila melenogaster:</i> determination of absorbed dose and induced genetic	805
effects	003
Photo: measurement in vicinity of a Siemens Primus accelerator	315*
Response of radiochromic films	339
Thermal	
Reflection: geometrical effects of hydrogenous moderators using a ²⁴¹ Am–Be source	175

Subject index volume 55 Applied Radiation and Isotopes 57 (2002) XV-XXVIII	XXIII
Reflection method for measurement of total hydrogen in petroleum products	617
Reflection method to assay nuclear materials in solutions	693
Nitrogen In vivo NAA: feasibility of using an accelerator	767
Octasilsesquioxane	
Use as a trapping cage for H-atoms and free radicals Oil	215
Industry: assessment of radiation exposure to NOR materials	141*
Industry in E and W deserts of Egypt: characteristics of NOR	135
Products, Ghanian: total hydrogen content by thermal reflection method	617
Oxygen 18-	
¹⁸ O(p,n) ¹⁸ F reaction: application to targetry	457
¹⁶ O beam: use to irradiate a thulium target with production of ¹⁸¹ Re	751
Palladium	
¹⁰³ Pd n.c.a.: cyclotron production by bombardment of a rhodium target	441
¹⁰³ Pd source: Monte Carlo calculations to determine the TG-43 brachytherapy dosimetry parameters	775
Paraffin	
Moderator: geometrical effects on thermal neutron reflections using a ²⁴¹ Am–Be source	175
Particle	
Airborne: effectiveness of spectrometry in α -activity monitoring	543
Peak Full groups officiency. Monto Corlo determination for a UPC - determination.	102
Full energy efficiency: Monte Carlo determination for a HPGe detector Perovskite (KMgF3)	103
Activated by Ce and Er impurities: thermoluminescent properties	533
PET	
Metabolites: measurement after elution by HPLC	229
Synthesis of 16α -[18 F] fluoroestradiol-3,17 β -disulphamate for use as a tracer	631
pH	
Effect on sorption of Np and Pa to mixed anaerobic bacteria	427
Phantom C 1927	100
PMMA: use in determination of dosimetric characteristics of ¹⁹² Ir brachytherapy sources	189
Rando: use in dose compensation studies of total body irradiation	623
Rhizophora spp. wood: use for dosimetric purposes for high energy photon and electron beams	297 235
Use in determination of absorbed dose for photon and electron beams comparing different protocols	233
Phosphor	
Li ₂ CO ₃ and CaSO ₄ : DY: evaluation for ESR dosimetry	253
Photon	200
Activation of indium foils: application to measurement of high dose rates	549
Radiation dose enhancement at material interfaces	323
Platinum	
Charcoal sorbent to separate ¹³¹ I from irradiated uranium	605
Plutonium	
Oxidation states in sea water	589
²³⁹⁺²⁴⁰ Pu and ²³⁸ Pu activity in atmospheric deposits	97
Polyethylene	
Layer: prevention of radon diffusion into cement	115
Porcelain	0.43
Insulators: possible use for radiation dose reconstruction by EPR spectroscopy	843

n	
Positron Emitters: development of detector	229
Potassium	229
40 K: γ -dose rate from building materials in Sicily	259
KMgF ₃ activated by Ce and Er impurities: thermoluminescent properties	533
Vertical distribution in sediments of São Francisco Basin, Brazil	393
Protactinium	
Effect of pH and temperature on sorption to mixed anaerobic bacteria	427
Protocol	
AAPM, HPA, IAEA, IPEMP: comparison for absorbed dose determination	235
Proton	
30–100 keV: response of a thermoluminescent dosimeter	679
[11C]Raclopride	
Automated preparation by a simple loop method from [11C] methyl triflate	17
Radiation	
Low dose to Chernobyl clean-up workers: persistence of dicentrics in blood	335
Total body therapy: dose compensation	623
Radioactivity	022
Deposition to ground of nuclides: dependency on local and collector surface effects in sampling	823
Measurement in different types of marble and granite	853
Measurement in effluent water from CERN accelerator: calibration of monitors	81
Minimum level detectable in in situ γ -spectrometry	197
Natural: effect of waste from fertilizer plant in S. Spain	419
Natural, in soil in southern Egypt	873
Radioimmunotherapy 213p: 6	1.00
Preparation of ²¹³ Bi for α-particle therapy	463
Radiometric prospecting	889*
On rocks with Cu–U mineralization in the Singhbhum zone of Bihar Radionuclide	889**
Naturally occurring	
Assessment of exposures to personnel in the oil and gas industry	141*
Characteristics in oil extracted from E and W deserts of Egypt	135
Preconcentration and measurement of low levels of γ -emitters in coastal waters	653
Radiopharmaceutical	
Preparation of ^{99m} TcN(CBDTC) ₂	453
Short lived α -emitting: preparation for radioimmunotherapy	463
Radium	
Gamma dose rate from building materials in Sicily	259
Solvent extraction using sym-di[4(5)-tert-butylbenzo]-16-crown-5-oxyacetic acid	609
Radon	
Bronchial dosimeter design for measurement of progeny	707
Concentration and effective doses in ancient Egyptian tombs	355
Concentration in soil gas: comparison of methods of determination	273
Diffusion through varying depths of cement	115
Evaluation of α -activity per unit volume of natural samples using SSNTD Exhalation rate	205
In rocks with Cu–U mineralization in Singhbhum zone, Bihar	889*
In soil in southern Egypt	873
Measurement in different types of marble and granite	853

Subject index volume 55 l Applied Radiation and Isotopes 57 (2002) XV-XXVIII	XXV
Indoor levels from building materials in Sicily	259
Measurement by activated charcoal: simulation of skim-off method	121
Temporal variations in soil related to earthquakes	267
Rare earth element	
Determination in phosphate fertilizer by NAA	569
Resonance self shielding factor	
Monte Carlo calculation for epithermal; neutrons in wires	447
Rhenium	
¹⁸¹ Re: separation carrier free from ¹⁶ O-irradiated thulium target	751
¹⁸⁸ Re: standardization of decay data	89
Rhodium	
Target: use in cyclotron production of ¹⁰³ Pd	441
Rice	
Straw paper: ¹³⁷ Cs content in the 1960s in Japan	327
Rock	
Aeolian volcanic arc: natural γ -radiation	737
Sedimentary in São Francisco basin, Brazil: vertical distribution on U, Th and K and volumetric heat production	393
volumetre neat production	
Sample	
Cu-U mineralised in the Singhbhum zone, Bihar: radon exhalation and radiometric prospecting	889*
Environmental: minimum detectable activity by in situ γ -spectrometry	197
Natural: radon and thoron detection by SSNTD	205
Powdered milk: self absorption correction for γ -ray spectrometry measurements	697
Uncertainties in counting efficiency in γ -ray spectrometry	685
Scanner	
Document: use for reading radiochromic films for dose assessment	339
Scintillator	
Granular: calculation of the detective quantum efficiency (DQE)	831
Sediment	
²⁴¹ Am determination by ID-HR-ICP-MS	161
Deposition and accumulation rate in the Gökova Bay (Aegean Sea-Turkish coast)	581
In West Turkey: factor analysis applied to distribution of elements	721
Of São Francisco Basin, Brazil: vertical distribution of U,Th and K and volumetric heat production rates	393
River: use of gold as a monostandard in NAA by k_0 method	595
Skin	
Dose measurement using ultra thin TLDs	383
Software	
Efficiency transfer for γ-ray spectrometry: intercomparison	493
Kay zero/Solcoi: use with Kay zero-assisted NAA facilities Soil	347
Gas: radon concentration determination and comparison of methods	273
Southern Egypt: natural radioactivity and radon exhalation rate	873
⁹⁰ Sr content from Biscay, Spain	521
Temporal variations of radon related to earthquakes	267
West Turkey: factor analysis applied to distribution of elements	721
Solid state nuclear track detector (SSNTD)	
Efficiency for radon and thoron in natural samples	205

Solvent	
DMSO: labelling side reaction of methylations with n.c.a. [11C]CH ₃ I	309
[DTBDB]16C5-OAcH: use for extraction of radium	609
Somatostatin	
Analog-Lanreotide: direct labelling with ^{99m} Tc	647
Spectrometer	
ESR: use in evaluation of alanine dosimeters for blood irradiation measurements	13
Ge-X-ray: EUROMET intercomparison of efficiency transfer software	493
Liquid scintillation: use for ⁹⁰ Sr determinations and factor of merit and minimum detectable activity	849*
Low level, using planar HPGe shielding: tests and system performance for ²¹⁰ Pb determination in air filter samples	129*
Spectrometry	
α -: effectiveness in monitoring α -activity in industrial airborne particles	543
α-: use to determine activity of ^{239 + 240} Pu and ²³⁸ Pu in atmospheric deposits in Spain γ-ray	97
In situ: minimum detectable activity	197
Intercomparison of efficiency transfer software	493
Self absorption correction for powdered milk samples	697
Uncertainties in sample properties and counting efficiency	685
Use to discriminate between natural and depleted uranium	221
Isotope dilution, high resolution, inductively coupled plasma, mass (ID HR ICP MS): use for determination of ²⁴¹ Am in sediments	161
Spectroscopy	
Digital XRF bone lead system: calibration and characterisation	527
EPR: dose reconstruction from irradiated porcelain insulators	843
ESR of H-atoms trapped in octasilsesquioxanes	215
SRM,s(standard reference materials)	505
Element concentrations by k_0 -method and use of gold as a monostandard	595
Strontium 90Sr	
	521
Content in soils from Biscay, Spain Determinations: factor of merit and minimum detectable activity by gas flow proportional and Cherekov counting	521 849*
In dental tissue: comparison of dose calulation to EPR measurement	363
Synovectomy	303
Preparation and studies of ⁹⁰ Y labelled particles	471
	471
Target	457
Gas: proof of principle for production of ¹⁸ F fluoride Rhodium: use for ¹⁰³ Pd production	457
Silver, irradiated: separation on 111 In	441
Thulium, ¹⁶ O irradiated: for production of ¹⁸¹ Re	293 751
Technetium	131
^{99m} Tc generator: extension of useful life by using an alumina chromatographic column	561
^{99m} Tc labelling of glycosylated-somatostatin-14	181
^{99m} TcN(CBDTC)2: preparation and biodistribution in mice	453
^{99m} Tc: use to label Lanreotide	647
Teeth	047
EPR dosimetry on dental enamel of children after the Chernobyl accident	71
⁹⁰ Sr absorbed dose calculation by Monte Carlo simulation: comparison to	363
EPR measurements	505

Subject index volume 55 Applied Radiation and Isotopes 57 (2002) XV-XXVIII	XXVII
Tellurium	
¹²⁴ Te(d,xn) ^{124,125} I reactions: excitation functions with reference to ¹²⁴ I production	303
¹²⁵ Te(p,xn) reactions: excitation functions with reference to production of ¹²⁴ I Temperature	149
Effect on sorption of Np and Pa to mixed anaerobic bacteria	427
Thermoluminescent compound	421
Evaluation of Li ₂ CO ₃ and CaSO ₄ :Dy for ESR dosimetry	253
KMgF ₃ (perovskite) activated by Ce and Er impurities; properties	533
Thickness	222
Determination of thin films by NAA	9
Thin layer activation technique	7
Application for on-line erosion monitoring	281
Thorium	201
Distribution in soil and sediment in W. Turkey: factor analysis	721
Mineralization in two mica granite of Gabal Ribdah area, Egypt	861
[²²⁸ Th] barium sulfate source: use for a ²¹² Pb generator	433
Th(IV) source: preparation by electrodeposition in presence of Ca ²⁺ and trivalent metals	167
Vertical distribution in sediments of São Francisco basin, Brazil	393
Thoron	393
Evaluation of α -activity per unit volume of natural samples using SSNTD	205
Thulium	203
¹⁶ O irradiated target: use to produce carrier free ¹⁸¹ Re	751
Thyroid	131
Feasibility of in vivo ¹³¹ I monitoring with an imaging plate	513
Tissue	313
Dental: ⁹⁰ Sr absorbed dose calculation and comparison to EPR measurements	363
Tomb	303
Ancient Egyptian: radon activity concentrations and effective doses	355
Tumour	333
Imaging: use of ^{99m} Tc labelled cyclam acid porphyrin(CAP)	641
maging, use of the labelled cyclain acid porphyrm(C/H)	041
Uranium	
Content in rock in the Aeolian volcanic arc and air absorbed dose rate	737
Cu mineralization of rocks in Singhbhum zone, Bihar: radiometric prospecting	889*
Distribution in soil and sediments in W. Turkey: factor analysis	721
Isotopes: disequilibrium in some Syrian groundwater	109
Mineralization in two mica granite of Gabal Ribdah area, Egypt	861
Natural and depleted: discrimination by γ -spectrometry	221
Ore from south eastern desert of Egypt: series disequilibrium dating	881
U(VI) source preparation by electrodeposition in presence of Ca ²⁺ and trivalent metals	167
Vertical distribution in sediments of São Francisco basin, Brazil	393
Water	
Coastal: preconcentration and measurement of low levels of γ-emitting radioisotopes	653
Effluent from CERN accelerator: calibration of monitors for radioactivity measurements	81
Electrolytic diffusion coefficient of CsBr	289
Geothermal in Murtazabad area, Pakistan: origin and subsurface history	731
Ground: effect of fertilizer plant in S. Spain and natural radioactivity	419
Ground, in Syria: disequilibrium of uranium isotopes	109
Lake: ¹²⁹ I concentrations resulting from Chernobyl and environmental implications	715
Moderator: geometrical effect on thermal neutron reflection using a ²⁴¹ Am–Be source	175

¹⁸ O labelled: use in the electrochemical production of ¹⁸ F	755
Rain: activity of ²³⁹⁺²⁴⁰ Pu and ²³⁸ Pu from the atmosphere	97
Sea: plutonium oxidation states	589
Wire	
Monte Carlo calculation of epithermal neutron resonance self shielding factors	447
Wood	
Rhizophora spp.: study for use as a phantom for photon and electron beam dosimetry	297
X-ray	
Emission probabilities for decay of ¹⁷⁷ Lu and ¹⁸⁸ Re	89
Fluorescence bone-lead system: calibration and characterisation	527
Low energy threshold scintillation detector at Fréjus underground laboratory	485
Use in measurement of mass attenuation coefficients of elemental materials in range $6 \le Z \le 82$	505
With energy in Ge k-absorption edge: effect on response of HPGe detectors	331
XRF: lead concentration and uncertainty in in vivo analysis in bone	799
Yttrium	
90V labelled particles for use in radiation synovectomy; preparation and studies	471

